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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,207	11/24/2003	Chang Yi Wang	1151-4153US2	8598
27123 7590 07/01/2008 MORGAN & FINNEGAN, L.L.P. 3 WORLD FINANCIAL CENTER NEW YORK, NY 10281-2101				
EXAMINER				
ROONEY, NORA MAUREEN				
ART UNIT		PAPER NUMBER		
1644				
NOTIFICATION DATE		DELIVERY MODE		
07/01/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTOPatentCommunications@Morganfinnegan.com

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### Office Action Summary

**Application No.**

10/723,207

**Applicant(s)**

WANG ET AL.

**Examiner**

NORA M. ROONEY

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 April 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 3, 7 and 10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 3, 7 and 10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date: \_\_\_\_\_



### DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 04/02/2008 has been entered.
2. Claims 3, 7 and 10 are currently pending and under consideration as they read on a peptide immunogen comprising SEQ ID NO:5-8 or 84 and a promiscuous T cell epitope.

### Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).



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4. Claims 3, 7 and 10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2-6 of U.S. Patent No. 6,713,301 (PTO-892; Reference A). Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are directed to synthetic peptide-which comprises (a) a promiscuous helper T cell epitope (artificial helper T cell epitope in the '301 Patent) , (b) an IgE-CH3 domain antigen peptide, wherein said IgE-CH3 domain antigen peptide i) is 25 acids in length ii) contains two cysteine residues separated by about 23 amino acid residues, and iii) is selected from the group consisting of SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:84 wherein from one to four of the residues in SEQ ID NO:5 is conservatively substituted (Target antigenic site in the '301 Patent); and optionally (c) an immunostimulatory invasin domain, SEQ ID NO: 13 (General immunostimulatory sequence of SEQ ID NO:78 in the '301 patent) in instant claim 3, wherein the synthetic peptide induces anti-IgE antibody production in a mammal in instant claim 7; and wherein said helper T cell epitope is an SSAL epitope and wherein said helper T cell epitope has an amino acid sequence selected from the group consisting of SEQ ID NOS: 9-12, SEQ ID NOS: 61-82, and SEQ ID NO: 89 (artificial helper T cell epitope in the '301 Patent) in instant claim 10.

5. Claims 3, 7 and 10 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,811,782 (PTO-892; Reference B). Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant claims are directed to a synthetic peptide-which comprises (a) a promiscuous helper T cell epitope , (b) an IgE-CH3 domain antigen peptide, wherein said



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IgE-CH3 domain antigen peptide i) is 25 acids in length ii) contains two cysteine residues separated by about 23 amino acid residues, and iii) is selected from the group consisting of SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, SEQ ID NO:84 wherein from one to four of the residues in SEQ ID NO:5 is conservatively substituted; and optionally (c) an immunostimulatory invasin domain, SEQ ID NO: 13 in instant claim 3, wherein the synthetic peptide induces anti-IgE antibody production in a mammal in instant claim 7; and wherein said helper T cell epitope is an SSAL epitope and wherein said helper T cell epitope has an amino acid sequence selected from the group consisting of SEQ ID NOS: 9-12, SEQ ID NOS: 61-82, and SEQ ID NO: 89 in instant claim 10 Claims 1-4 of U.S Patent 6,811,782 are directed to n IgE-CH3 domain antigen peptide of between about 25 and about 29 amino acids in length containing two cysteine residues separated by about 23 amino acid residues, selected from the group consisting of SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, and SEQ ID NO:84, or an immunologically functional analog thereof, wherein from one to four of the residues in SEQ ID NO:5 is conservatively substituted or deleted in claim 1 of the '782 Patent; the IgE-CH3 domain antigen peptide of claim 1 selected from the group consisting of SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, SEQ ID NO:8, and SEQ ID NO:84 in claim 2 of the '782 Patent; A peptide conjugate comprising a carrier protein covalently attached to one or more IgE-CH3 domain antigen peptides according to claim 1 in claim 3 of the '782 Patent; and wherein the carrier protein is keyhole limpet hemocyanin in claim 4 in the '782 Patent.

6. No claim is allowed.



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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nora M. Rooney whose telephone number is (571) 272-9937. The examiner can normally be reached Monday through Friday from 8:30 am to 5:00 pm. A message may be left on the examiner's voice mail service. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen O'Hara can be reached on (571) 272-0878. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

June 22, 2008

Nora M. Rooney, M.S., J.D.

Patent Examiner

Technology Center 1600

/Maher M. Haddad/  
Primary Examiner,  
Art Unit 1644